

## REMARKS

No claims have been amended or cancelled. Claims 1 - 13 are pending in the application.

### **Claim Rejections Under 35 U.S.C. §103(a).**

Claims 1, 7 – 9 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,742,432 to Thillays et al. (Thillays) in view of U.S. Patent No. 6,641,282 to Perlo et al. (Perlo).

As stated in MPEP §2143, to establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The Thillays and Perlo references, even if combined, do not disclose, teach or suggest all the limitations of claims 1 and 9.

Claim 1 recites in pertinent part:

a pair of longitudinal reflecting surfaces extending axially and outwardly from lower limits adjacent said upper edges and laterally spaced apart by said row of substantially circular reflecting surfaces to define a trough axially thereabove

Claim 9 recites in pertinent part:

a pair of longitudinal reflecting surfaces extending upwardly and outwardly from a lower edge substantially tangent to said rims, said longitudinal reflecting surfaces being laterally separated from each other by a distance substantially equal to the diameter of said rims

Thillays is directed to structures and methods for assembling LED matrix arrays. Thillays discloses a wafer 20 with parabolic reflecting cavities 21 and openings 41 arranged to receive the LEDs. No trough-like reflector is disclosed, taught or suggested. Thillays is primarily concerned with reducing the cost and complexity of assembling an LED matrix (see Thillays, column 1, lines 22-40). Thillays does not

suggest the need for any improvements to the disclosed reflector wafer 20 and its joined parabolic cavities 21.

Perlo is directed to a reflector assembly for a longitudinally extending fluorescent lamp. The reflector assembly includes cup-like elements 4 above the fluorescent tube 1 and a secondary reflector 3 "constituted by an elongated tray-like element with a curved surface" beneath the fluorescent tube 1 (see Perlo, Figure 3). Perlo does not disclose, teach or suggest locating the secondary reflector longitudinal surfaces to define a trough extending above the "cup like elements 4". Such a configuration is incompatible with the intended purpose of the reflector of Perlo.

The Examiner's proposed combination of Thillays and Perlo does not disclose, teach or suggest the limitations of claims 1 and 9 quoted above.

There is no suggestion or motivation to combine the Thillays and Perlo references.

As discussed above, Thillays and Perlo address entirely unrelated problems involving two very different light sources. Thillays relates to LED light sources, which are bright, point light sources. Perlo relates to a reflector assembly tailored to advantageously gather and redirect light from a low luminance, longitudinally extending cylindrical fluorescent tube.

As an initial matter, there is no suggestion in Thillays that the reflector configuration disclosed for an LED matrix is in need of improvement. One of skill in the art in possession of Thillays would not be motivated to seek out the teachings of Perlo.

The Examiner's stated motivation to combine Thillays with Perlo is to "enable a low luminance, at the same time ensuring high efficiency." The Examiner's proposed motivation, taken from Perlo (column 1, lines 14-16), relates entirely to fluorescent tube light sources, e.g., "low luminance" (brightness) and does not relate at all to LED light sources, which are high luminance, point light sources. The LED matrix of Thillays is entirely incompatible with the reflector assembly of Perlo. Further, adding the longitudinal reflecting surfaces of Perlo to the LED matrix of Thillays would render the Thillays matrix unsuitable for its intended purpose. Further, there is no evidence, either

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in the references themselves or in the knowledge of one of skill in the art, to support the proposition that such a combination would actually produce a low luminance, high efficiency light source as suggested by the Examiner.

In sum, the Examiner has failed to assert a prima facie case of obviousness with respect to claims 1 and 9. Claims 1 and 9 are patentable over Thillays and Perlo for at least these reasons.

Claims 2-8 depend directly or indirectly from claim 1 and are patentable for at least the reasons stated in support of claim 1. Claims 10-13 depend directly or indirectly from claim 9 and are patentable for at least the reasons stated in support of claim 9.

The Examiner has indicated that claims 2-6, 10, 12 and 13 are allowable.


In summary, Applicants have addressed each of the objections and rejections within the present Office Action. It is believed the application now stands in condition for allowance, and prompt favorable action thereon is respectfully solicited.

The Examiner is invited to telephone Applicant(s)' attorney if it is deemed that a telephone conversation will advance prosecution of this application.

Respectfully submitted,

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